#### (19) World Intellectual Property Organization International Bureau



# I NADIO DINNERA IN DIRINI DOTTI NELI ILI INI DELIC NEDIO DINNI BILBE ERIN BURIDI HEDDO HIN ERE

#### (43) International Publication Date 11 January 2001 (11.01.2001)

PCT

### (10) International Publication Number WO 01/02548 A3

- C12N 7/00, (51) International Patent Classification7: 15/85, C12M 3/00, C07K 14/00, C12N 9/00, 9/02
- (21) International Application Number: PCT/EP00/05029
- (22) International Filing Date: 2 June 2000 (02.06.2000)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 9915413.0

1 July 1999 (01.07.1999) GB

- (71) Applicant (for all designated States except US): GLAXO GROUP LIMITED [GB/GB]; Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex UB6 0NN (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): FORD, Martin, James [GB/GB]; Glaxo Wellcome PLC, Gunnels Wood Road, Stevenage, Hertfordshire SG1 2NY (GB), HISSEY, Paul, Henry [GB/GB]; Glaxo Wellcome PLC, Gunnels Wood Road, Stevenage, Hertfordshire SG1 2NY (GB). PATEMAN, Tony, James [GB/GB]; Glaxo Wellcome PLC, Gunnels Wood Road, Stevenage, Hertfordshire SG1 2NY (GB).

- (74) Agent: REES, Marion, L.: Glaxo Wellcome PLC, Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex UB6 ONN (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

#### Published:

- With international search report.
- (88) Date of publication of the international search report: 12 July 2001

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

## (54) Title: METHODS FOR THE PROPAGATION OF LYTIC ORGANISMS

(57) Abstract: The present invention provides a method for the propagation of lytic organisms which comprises the infection of the cells of a stable cell line within a hollow fibre bioreactor with a lytic organism, wherein after said infection, said organism multiplies within the cells and can be harvested, characterised in that the cell line can survive for at least ten days after said infection. The invention further provides a method as herein described wherein after harvest, the cell line is allowed to re-populate the bioreactor, and at least one subsequent harvest may be taken, with the cell line being able to re-populate the bioreactor after each harvest.